

## REMARKS

The Office Action of March 26, 2007, is acknowledged. Claims 1-11, 22, 31, and 34-36 were rejected as being obvious over U.S. Patent No. 6,304,450 to Dibene et al. in view of U.S. Patent No. 5,396,397 to McClanahan et al. Additionally, the Examiner withdrew claims 15-20 and 23-30 based upon the election submitted by applicant. The Examiner also did not consider claims 12-14 and 21 based upon the assertion that these claims included limitations not disclosed in the structure shown as Species 5.

### Claim Not Considered

Applicant respectfully traverses the Examiner's refusal to consider claim 21 as part of the structure in Species 5. The larger structure composite included in claim 21 is generic for all of the species in the application. Applicant directs the Examiner to paragraph [0002] which states, "The present invention pertains to a multilayered composite sandwich structure with embedded electronics...Some examples of uses include aircraft sandwich bulkhead structure with embedded avionics, automotive instrument display panels with embedded electronics, aircraft instrument consoles, and flat sandwich circuit cards." Furthermore, paragraph [0006] of the present application specifies that it is "an object of the invention to provide a composite structure with embedded electronics. It is also an object of the invention that the electronics may be in embedded in structural composite structures such as found in aircraft." In addition, paragraph [0010] states that,

"When used as a multifunctional structure with embedded electronics, the invention may reduce or eliminate the need for electronic housing boxes and supporting racks. The application of the invention to aircraft structure may reduce or eliminate the avionics boxes and avionics racks. This may result in a substantial decrease in weight and cost. In addition, the invention results in a sandwich circuit construction that may be load carrying and contributes to the stiffness and strength of the aircraft structure."

Accordingly, all of the different species embodied and disclosed in the application are available for use with a generic larger structural composite structure to provide stiffness, strength and support to the structural composite structure.

Accordingly, applicant renews its assertion that claim 21 should be considered under applicant's election of Species 5.

Claim Rejections Under 35 USC § 103(a)

Applicant has amended claim 32 into independent form including all of the limitations of the base claim and the intervening claims as the Examiner has indicated would be allowable. Claim 31 has been canceled. In addition, applicant has amended claim 1 to further distinguish applicant's invention from the cited patents. In particular, the characteristics of the core have been clarified from U.S. Patent No. 6,304,450 to Dibene et al. which merely has spacers and standoffs between the printed circuit boards. The spacers are merely to provide the spacing between the circuit boards for the package and not to provide structural rigidity. According, claim 1 has been clarified with the distinction that the core has trusses that have a longitudinal axis that runs parallel to the facesheet and circuit laminates. This provides a structure with rigidity against bending not shown in Dibene et al.

If additional time is required, please consider this a petition therefore and charge any shortages in fees, or apply any overpayment credits, to Baker & Daniels LLP's Deposit Account No. 02-0387 (973748.01). However, please do not include the payment of issue fees.

Respectfully submitted,



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August 27, 2007

Date



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